



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,777	03/30/2001	Milind M. Buddhikot	554-263 (Buddhikot 3-2-5-	6410
26291	7590	09/09/2004	EXAMINER	
MOSER, PATTERSON & SHERIDAN L.L.P. 595 SHREWSBURY AVE, STE 100 FIRST FLOOR SHREWSBURY, NJ 07702			BRUCKART, BENJAMIN R	
			ART UNIT	PAPER NUMBER
			2155	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/823,777	Applicant(s) BUDDHIKOT ET AL.	
	Examiner Benjamin R Bruckart	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10 is/are rejected.
- 7) ☒ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Claims 1-10 are pending in this Office Action.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

Allowable Subject Matter

Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 10 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,438,652 by Jordan et al.

Regarding claim 1, in a network that includes at least one origin server (Jordan: col. 5, lines 41-46) and a plurality of network distributed proxy servers (NDPS) in communication with said at least one origin server (Jordan: col. 5, lines 31-41, 50-54), each NDPS including an associated cache (Jordan: col. 7, lines 23-28), a method for constructing a revised cache layout of a media clip at each NDPS in accordance with a lazy caching approach and token exchange, the method comprising the steps of:

- (a) receiving rank change information for said media clip from the origin server at said each NDPS (Jordan: col. 8, lines 9-13);
- (b) determining a revised cache layout responsive to the rank change information at said each NDPS (Jordan: col. 7, lines 7-22; col. 8, lines 14-28);
- (c) receiving a client request for at least one segment of said media clip at one of said each NDPS (Jordan: col. 7, lines 23-25);
- (d) returning said at least one requested segment from a cache associated with the one of said each NDPS in the case where a requested segment is stored therein (Jordan: col. 7, lines 25-28); and
- (e) otherwise, initiating a token exchange with another NDPS that stores the requested segment (Jordan: col. 7, lines 29-35).

Regarding claim 2, the method of claim 1, wherein the step of determining a revised cache layout responsive to the rank change information, further comprises the step of:

determining whether to cache or discard each of a plurality of segments of said media clip using said rank change information (Jordan: col. 7, lines 7-22).

Regarding claim 3, the method of claim 2, wherein the step of determining whether to cache or discard each of a plurality of segments of said media clip using said rank change information, further comprises the step of:

re-computing a caching probability for each of said plurality of segments of said media clip and caching those segments whose computed probability is computed to be above a predetermined threshold value and not storing those segments whose computed

Art Unit: 2155

probability is computed to be below said predetermined threshold value (Jordan: col. 7, lines 7-22; col. 8, lines 6-13).

Regarding claim 4, the method of claim 1, wherein the step of receiving rank change information for said media clip from the origin server, further includes the step of:

periodically collecting said rank change information at the origin server (Jordan: col. 7, lines 7-11).

Regarding claim 5, the method of claim 4, wherein the step of receiving said rank change information from the origin server, further includes the steps of:

(a) maintaining a local hit count for said media clip at each respective NDPS (Jordan: col. 6, lines 28-38; col. 8, lines 37-55);

(b) periodically reporting the local hit count from each respective NDPS to the origin server (Jordan: col. 7, lines 7-11);

(c) combining the local hit counts reported by each respective NDPS at the origin server to determine whether a rank change for said media clip has occurred (Jordan: col. 6, lines 50-64; checks to see if its overloaded); and

(d) reporting said rank change from said origin server to each respective NDSP (Jordan: col. 7, lines 7-22).

Regarding claim 6, the method of claim 5, wherein the local hit count is a measure of a local preference of the media clip (Jordan: col. 8, lines 37-46).

Regarding claim 10, a system for constructing a revised cache layout of a media clip at a plurality of network distributed proxy servers (NDPS) in accordance with a lazy caching approach and token exchange (Jordan: col. 7, lines 7-22), the system including an origin server in communication with said plurality of NDPS's (Jordan: col. 5, lines 32-41), each NDPS including an associated cache (Jordan: col. 7, lines 23-30), the system including:

Art Unit: 2155

means for receiving rank change information for said media clip from the origin server (Jordan: col. 7, lines 7-22);

means for determining a revised cache layout responsive to the rank change information (Jordan: col. 6, lines 54-66; updated caching table);

means for receiving a client request for at least one segment of said media clip (Jordan: col. 7, lines 23-35);

means for returning said at least one requested segment from an NDPS cache from among said plurality of NDPS's (Jordan: col. 7, lines 26-29); and

means for initiating a token exchange with another NDPS which stores the requested segment (Jordan: col. 7, lines 29-35).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R Bruckart whose telephone number is (703) 305-0324. The examiner can normally be reached on 8:00-5:30 PM with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (703) 308-6662. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0324.

Benjamin R Bruckart
Examiner
Art Unit 2155
brb
September 3, 2004


HOSAIN ALAM
SUPERVISORY PATENT EXAMINER